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ABSTRACT

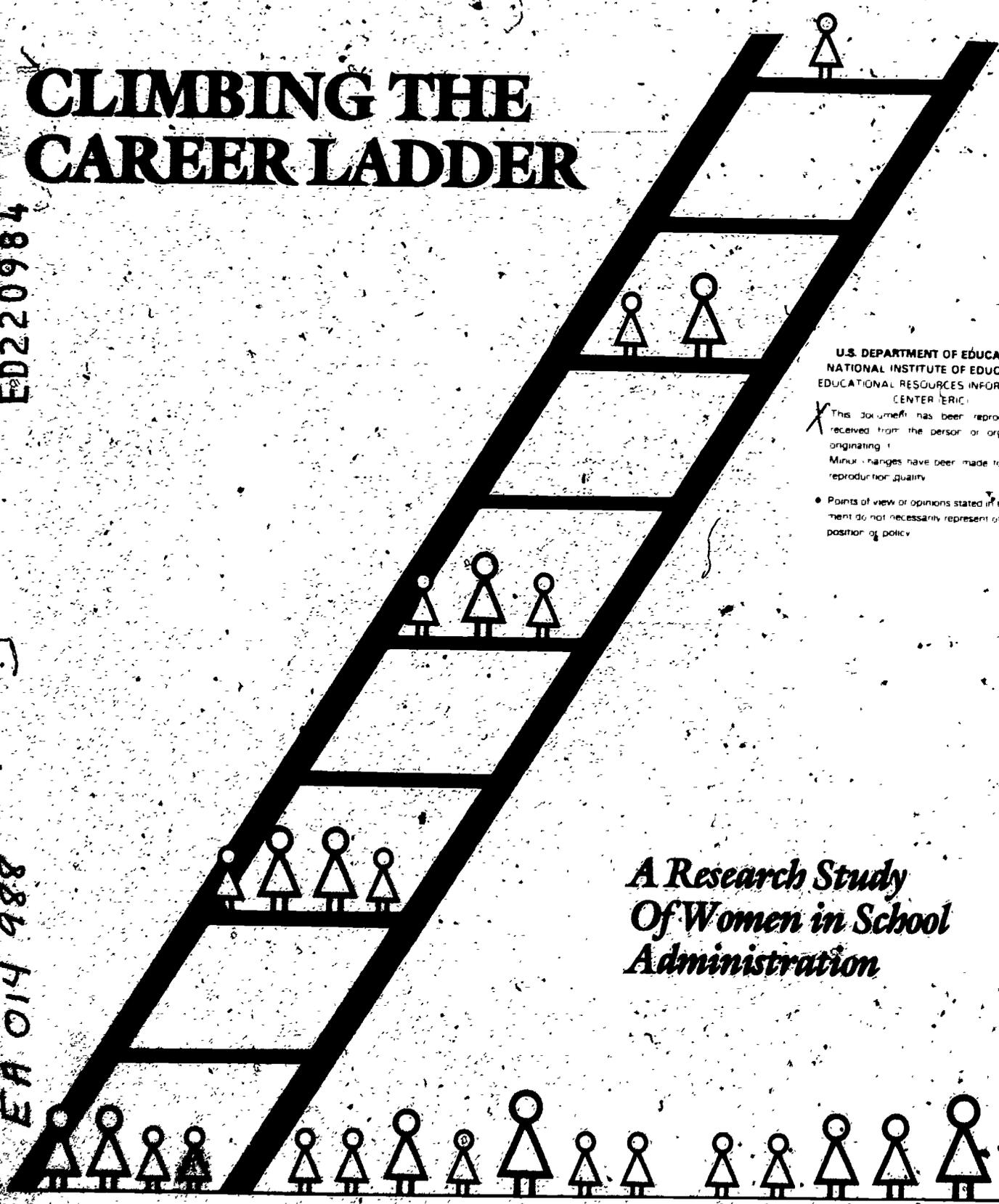
The career training offered to women in school administration by the American Association of School Administrators (AASA) in 1977 decreased the influence of external barriers on the participants' upward career mobility. Along with 31 non-trainees who served as a comparison group, all 75 AASA trainees responded in 1981 to a questionnaire collecting data on the effectiveness of the training program. Statistical regression methods were used to determine the effects on their careers of factors in women's backgrounds, perceived internal and external barriers to career mobility, strategies used for career enhancement, and the characteristics of the districts where positions were sought. Among the findings were that the clarity of expression and types of job experiences revealed in women's resumes were strongly related to career growth; women who both rate highly on the basis of letters of reference and encounter fewer internal barriers tend to obtain superintendent positions; and lack of geographical mobility, failure to apply for more jobs, and uncertainty about life goals tend to hold women back. This report analyzes relationships among the variables in tabular form and includes the questionnaire and the job application evaluation procedure used in the study. (Author/PGD)

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# CLIMBING THE CAREER LADDER

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*A Research Study  
Of Women in School  
Administration*



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Climbing the Career Ladder:

A Research Study of Women in School Administration

A Report to the National Institute of Education  
Minorities and Women's Program  
U.S. Education Department

Office of Minority Affairs  
American Association of School Administrators

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## FOREWORD

The American Association of School Administrators has for a decade now had substantial programs for advancing the interests of women and minorities in education. Our commitment has resulted in significant publications on the subject and numerous programs designed to raise the level of awareness of our members and the general public. We have undertaken significant training programs to assist women in acquiring the skills necessary to advance in school administration. We have been the advocates of women and girls in all educational matters including instruction.

This research report will give the reader a sense of what we are up to and some of the results that have been produced so far. Fifty percent of AASA's women members have joined the organization within the past four years. It is our assumption that their membership has been attracted because of our affirmative effort to advance the interests of women. We believe that the development of the resources of women in our population is vital to our country's future. We shall continue our commitment to see that this resource is developed to the highest possible level.

Paul B. Salmon, Ed.D.  
Executive Director  
American Association of  
School Administrators

## EXECUTIVE SUMMARY AND RECOMMENDATIONS

This report, Climbing the Career Ladder: A Research Study of Women in School Administration, investigates the barriers facing women in school administration, the strategies used to overcome these barriers, and other exogenous factors related to upward career mobility. The study included 106 women, 75 of whom participated in career training provided by the American Association of School Administrators (AASA) through a grant from the Ford Foundation.

The results of the study show that the AASA training decreased the influence of external barriers on the participants' upward career mobility and paved the way to career change. Two factors, clarity of expression and past job experience related strongly to career growth, the survey found. Successful candidates for superintendent positions also receive high ratings on letters of reference and encounter fewer internal barriers.

The women in the study perceive more external rather than internal barriers to their careers. The greatest external barriers are employers' negative attitudes, lack of an influential sponsor, and lack of a professional network. The greatest internal barrier is conflict or confusion about life goals. However, lack of geographical mobility and failure to apply for more jobs are also barriers for women. For the four-year period studied, the women progressed in overcoming their own identified internal barriers.

On the basis of the findings of the study, the following recommendations are presented:

- o Organizations such as AASA should provide women with a support system to assist them in their career efforts by providing information on jobs, training, and other career opportunities, while at the same time providing them with the institutional and moral support they need.
- o Women in school administrations should be made aware that there are opportunities open to them outside of school administration, and that their skills are transferable to other fields. Some women realize mid-career that the superintendency, which is the apex of a career in school administration, is not for them, thus stunting their career development.
- o Training opportunities should be provided for women who are still starting their careers in education. There are teachers, for example, who could not even reach the administrator level because of the barriers they face. Careful selection and training of aspiring women teachers with potential will produce long term benefits for sex equity in educational administration.
- o School boards and school districts should investigate the extent to which women are represented in their administrative staff and closely examine their hiring/promotion practices and procedures. Too often, they will find that practices and procedures can stand some easy improvements to assure equity for women and other underrepresented groups.

## INTRODUCTION

Stereotypes about women evolved from absurd generalities. For example, Aristotle believed females to be "deformed males," a treatise by Smith (1981) reported. A couple of centuries later, a Roman public official declared that "woman is a violent and uncontrolled animal." Still later, Thomas Aquinas adopted Aristotle's view that women were defective. Martin Luther thought that because men have broad shoulders and narrow hips, they must possess more intelligence. In more recent times Freud posited that women, more than men, are prone to neurotic tendencies, especially hysteria.

Not all philosophers had anti-female attitudes; however, those negative attitudes that persisted contributed to myths about women as too emotional, too dependent and irrational, and unfit as effective managers.

Western leaders have traditionally been male, so managerial and leadership qualities have also been equated with men. On the other hand, timidity, deference, and self-abasement have been associated with women.

The absence of women in leadership positions is due to the different ways men and women are socialized, according to the woman's place model proposed by Estler (1975). For example, women are reared to defer to men, and to be nurturing rather than aggressive. Centuries old attitudes and prejudices can also explain discrimination in training and hiring practices that encourage promoting more men than women. A study by Neidig (1973) revealed that more male board members than female board members believe women cannot cope with the emotional and physical stress of administrative positions. Zellman (1976) suggested that the structural factors limiting women's leadership roles stem from society's values and beliefs.

Theories explaining the lack of women in educational administration can be categorized into internal and external barriers. Internal barriers stem from the personal conflicts experienced by women and the personal qualities often associated with them. Darley (1976) pointed out that the qualities traditionally associated with the role of wife-mother and those associated with the role of career woman are incompatible. This incompatibility leads to personal anxiety, personal sanctions, and the avoidance of one role (usually the career, achievement oriented role) and the acceptance of the mother-wife role. Because of role conflicts, women may lack geographical mobility and support from their families for their careers. They also may experience feelings of guilt or inadequacy in one or both roles. Hennig and Jardim (1977) also described internal barriers associated with women's lack of

aggressiveness, low self-image, lack of self-confidence, and lack of social skills in relating to other leaders. Women describe themselves as hesitant, reluctant to take risks, and often lacking in self-confidence.

External barriers obstructing women's climb on the career ladder include society's attitudes, systems, and structures. In a review, Shakeshaft (1979) listed external barriers related to women school administrators' success (or lack of it). The barriers included too few role models, lack of sponsorship, resentment by others, family responsibilities, and perceptions of female characteristics and abilities as incongruent with job demands.

Scores of surveys document aspiring career women's testimonies about barriers and strategies to overcome these barriers. What is lacking is a systematic inquiry into the effects the barriers have on upward career mobility. This report will try to fill that need.

Women's training programs, the establishment of women's study centers, affirmative action activities, networking, and other such strategies have existed now for a good while. Women's programs and women's study centers sprouted in college and university campuses in the 1960s with the growth of the women's movement. These centers offer courses and sponsor conferences, institutes, and seminars. Private organizations also conduct training programs for career-oriented women to help them develop their skills and overcome societal barriers.

The American Association of School Administrators (AASA), which is committed to equal opportunity for women, obtained a grant from The Ford Foundation in 1977 to conduct workshops to help women advance professionally. The workshops provided strategies to help women overcome internal and external barriers to getting administrative jobs. From 600 applicants, 75 women were selected and trained. The workshop's main objective was to place women in higher level school administrative positions, particularly as superintendents. The curriculum was specifically designed to assist women to:

- o develop a positive self-concept and to present it;
- o become professionally visible;
- o enlist influential sponsors;
- o discover potential jobs;
- o analyze jobs to determine their professional desirability;
- o write letters of application;
- o prepare an effective resume;
- o prepare for the interview by gathering basic needed

information, learning to present herself in the best way, and anticipating and handling stress questions;  
o discuss conditions of employment, including salary.

The workshop also provided insight to the women as to the pleasures and pains of the superintendency so that they could determine whether the superintendency was what they wanted.

## RESEARCH OBJECTIVES

In general, women involved in training programs, women's studies, networking and other activities make positive gains. However, the evaluation results of the various programs remain equivocal. If the programs were examined in the light of specific strategies taught, the question remains: Which barriers and strategies have been most significant in a woman's upward career mobility?

Women school administrators who were surveyed supported theories that identified barriers to and strategies for upward career mobility. Those theories have guided scores of women. However, more empirical methods are also needed to determine which barriers most deter women and which strategies most contribute to women's advancement.

Past studies asked women what factors they "believed" affected their careers. The present study also included women's responses about their experiences. However, the study also measured their individual career mobility and tested statistically the effects of the factors that were "believed" (based on previous surveys) to be related to career mobility.

This research effort is an empirical investigation of the barriers, strategies, and other factors that contribute to the upward career mobility of women school administrators by studying a group of women who expressed career aspirations four years ago. The study specifically asked:

1. What barriers did the women face, and what strategies did they use in applying for school administration positions four years ago and today?
2. Which strategies and barriers have the strongest (weakest) relationship with upward mobility in school administration?
3. What are the personal and exogenous variables which contribute to the upward mobility of a cross-section of women administrators?

The study further investigated the women trained by AASA in the Ford Foundation workshops by asking:

1. Where are the 75 women four years after training with regard to their careers?
2. What are the characteristics of the participants, both personal and professional?
3. What factors are related to the participants' career advancement?

4. What do the participants see as most critical in helping them advance?
5. How do a comparable group of women who did not participate in the Ford Foundation training compare with the trained women in using strategies in obtaining an administrative position?

An added benefit is feedback on the most and least effective components of the training program,

### Rationale

The findings of this study are important to three groups: (1) school boards, school districts, and school systems, (2) professional organizations, and (3) women.

This report will give school personnel a better understanding of the underlying factors that consciously or unconsciously influence selection of school administrators. Many school districts want to improve their efforts to eliminate unequal treatment of women. This report will encourage their efforts by making available to them information about the nature of the problem and how some women overcome it.

Organizations committed to and working toward women's equity, such as the AASA, can also gain from the research findings. These organizations can focus future women's equity activities and programs toward strengthening women's skills in strategies that have the strongest relationship to success.

The women themselves who aspire for upward mobility in school administration will be better equipped and guided in the pursuit of their career goals.

Finally, the findings from this research will, it is hoped, contribute significantly to an understanding of social issues in general and to women's equity issues in particular.

## PROCEDURES

### Research Model

This study compared the upward career mobility of trained and non-trained women through a semi-experimental, post-test only, comparison group model (Campbell and Stanley, 1963). Regression methods were also used to determine the contribution of various factors to upward career mobility. Then, the trained women recalled the helpful aspects of their training that contributed to their "success." Much has been said and written by women about how to get a higher position. However, this research report provides empirical data. These data support some of these claims and invalidate others. The report also shows the strength of the relationships among certain variables and success in obtaining a position.

### Sample

The AASA Ford Foundation workshop trainees and a comparative group of non-AASA trainees, each of whom expressed a desire for upward career mobility during the time the training workshops were held, were the subjects of a four-year follow-up study.

The study includes data on all the 75 AASA trainees. The comparative sample consists of 31 non-trainees (41 were originally sent the questionnaire). Eighteen of these non-trainees were alternates to the original training workshop. The rest include those whose applications for the workshop arrived late and those who wrote to inquire about training opportunities. All the women included in the study are qualified to be superintendents. They represent all the geographical regions of the United States, various types of school districts, educational systems, fields of educational specialization, and ethnic backgrounds.

### Variables Investigated

Background characteristics of the women in the sample. Data were collected in regard to the women's education, areas of expertise, experience, geographical location, position held four years ago, ethnic background, marital status, number and ages of children.

Barriers to Upward Career Mobility. The investigation focused on:

Internal barriers: personal anxieties about being a wife, mother and career woman, conflict or confusion regarding life goals, lack of assertiveness, lack of self-confidence, reluctance to take risk, lack of motivation (in pursuing career goals), and low professional perseverance in pursuing career goals.

External barriers: lack of female role models, lack of an influential sponsor, lack of support/encouragement from peers, lack of support/encouragement from family, personal characteristics and abilities incongruent with job demands, lack of professional network, employers' negative attitudes towards women, and conflict with husband's career.

Strategies. The strategies in which the 75 workshop participants were trained received particular attention: development and presentation of a positive self-concept, establishing a network, preparing an effective resume, and interviewing. Other strategies investigated include using an influential sponsor, developing and presenting a positive self-concept, attaining professional visibility, using a professional network, presenting an effective resume, preparing for an interview which will promote one's abilities, and resolution of role conflict.

District Variables. Geographical location, make-up of the school board (male, female, politician, academician in higher education, public school administrator, community leader), size of the district population, and economic condition of the districts where the women sought positions were determined.

#### Sources of Data

1. The questionnaire, which was used to obtain data on personal characteristics (age, ethnicity, marital status, number and ages of children); professional background (present position, education, expertise); internal and external barriers encountered in their careers prior to and after AASA training; strategies used to overcome these barriers; as well as characteristics of the districts where the women had applied for positions;
2. The resume and other supporting materials (i.e. letters of application, letters of recommendation) submitted by the sampled women 4 years ago. From these resumes, the women's qualifications were evaluated on the basis of six criteria. These are the same criteria which were used in the original selection of the AASA trainees: 1) position and responsibilities; 2) future aspirations in administration; 3) clarity of expression; 4) types of job experiences; 5) letters of reference; 6) evidence of opportunities for making presentations. On a scale of 1 to 5, ratings were given to each person in the sample on the basis of the above named criteria.

#### Data Analysis

Initially background information on all the women in the sample were tabulated and examined as a group. Information on the 75 trainees was analyzed. Differences between the personal

and professional characteristics of the AASA trainees and non-trainees were investigated. The resume ratings, the barriers they encountered before the training and today, and the career strategies they used during the intervening period, were also examined for similarities and differences.

To measure upward career mobility, various criteria were employed. One criterion was whether the person has been promoted to the superintendency. Not one of the women was a superintendent four years ago, but approximately 15 percent now hold the position. Another criterion used was an assigned growth rating derived by comparing the women's position to that of four years ago. For example, if a woman's present position is one level higher than her position four years ago, she would be given a career growth rating of 2. Those who did not move from their previous positions were given a rating of 1. A third criterion was the current type of position held.

The analyses used descriptive statistics, t-tests, and regression.

### Results

The results are divided into four parts. The first part provides background information on women in the sample. The second part deals with the follow-up of the 75 women who were trained by AASA four years ago. The third part compares the two groups: the trainees and non-trainees. Part 4 deals with an analysis of the variables related to upward career mobility. Generalizations from the results are made on the assumption that the sampled women represent the country's women administrators.

## RESULTS

### PART I

#### Background Information

##### Personal Characteristics of the Sample

The majority of the women (90%) are between 36 and 55 years of age. Approximately half of the sample (51%) are between the ages of 36 and 45. Their ethnic composition include 75 white (71%), 22 black (21%), and the rest of other ethnic backgrounds. Fifty-six or 53% are married. A third of the sample women have no children. About half have one to three children; 30 women have children 18 years old or younger.

##### Professional Qualifications

Eighty-five percent of the sampled women have doctoral degrees in education. Forty-seven percent reported the elementary level as an area of specialization. Almost a third (32%) noted secondary education as an area of specialization, and a few reported early childhood, middle school and higher education as areas of specialization (6%, 13%, and 13%) respectively.

Administration was most frequently mentioned as an area of expertise (92%), followed by curriculum development (59%), public relations (41%), evaluation (37%), and personnel relations/negotiations (35%). Other areas of expertise were named by less than one third in the sample.

##### Positions Sought

The question "Since December 1977, how many higher level administrative positions have you actively sought (including promotions)?" provoked interesting responses. A great majority (80%) of the women sought only five or fewer higher level positions. Less than 15% pursued more than ten higher level positions. About one in five (21%) did not actively seek a higher level position.

##### Job Offers Received

Almost three-fourths (73%) received one or more job offers in the past four years, while 27% did not. Of the 71 women who received job offers, 28 received one, and 25 received two. The rest received three or more offers.

##### Self-rating of Professional Success

Approximately half of the women (51%) rated themselves very successful. Nearly all the rest (46%) rated themselves

moderately successful. A few (3%) rated themselves as "still trying to get there." The reasons for rating themselves successful varied, but were generally related to attaining the superintendency or some other high level position, and progress in attaining professional goals. They also include high salary, personal satisfaction with job, and excellent job performance. Most of those who do not consider themselves successful, or just moderately so, cited that they are still trying to attain the superintendency or some desired goal (mentioned by 22 women). (See Appendix C and D).

### Barriers to Upward Career Mobility

Tables 1 and 2 provide detailed information on the internal barriers encountered by the sampled women, four years ago and today.

Table 1 shows that the women now experience fewer internal barriers than four years ago. The greatest change is in "lack of assertiveness." Only 54% said that this barrier did not apply to them four years ago; 81% responded no for today. Most of the women have always been motivated and had high perseverance (84-86% said no, they did not lack these qualities). The greatest problem area seems to be conflict or confusion regarding life goals. Fifty percent experienced this barrier four years ago, and 45% do not encounter the barrier today.

Table 1  
Percent of Women  
Experiencing Internal Barriers

	Today			Four Years Ago		
	No	Somewhat/Sometimes	A lot	No	Somewhat/Sometimes	A lot
1. Personal anxieties about being a wife/mother and being a career woman	81	17	2	60	31	9
2. Conflict or confusion regarding life goals	55	42	3	50	37	12
3. Lack of assertiveness	81	19	0	54	40	6
4. Lack of self-confidence	77	23	0	60	32	7
5. Reluctance to take risk	72	26	2	56	34	10
6. Lack of motivation (in pursuing career goals)	85	15	0	86	13	1
7. Low professional perseverance (in pursuing career goals)	85	15	0	84	15	1

Table 2 shows that the sampled women encounter external barriers to a greater degree than they do internal barriers. The external barriers most often encountered are lack of an influential sponsor, employers' negative attitudes toward women, and lack of a professional network. As in the case of internal barriers, the women said they experienced external barriers less often today than four years ago.

The sampled women's individual comments show that the external barriers were related to the attitudes of employers, such as school boards, the community in general, or other persons in the community (see Appendix E).

One of the barriers they encounter least often is "personal characteristics and abilities incongruent with job demands," perhaps an internal barrier erroneously identified as an external barrier. Lack of support, encouragement from family, and conflict with husband's career are, interestingly, the least encountered barriers.

Table 2

Percent of Women  
Experiencing External Barriers

	<u>Today</u>			<u>Four Years Ago</u>		
	<u>No</u>	<u>Somewhat/Sometimes</u>	<u>A lot</u>	<u>No</u>	<u>Somewhat/Sometimes</u>	<u>A lot</u>
1. Lack of female role models	46	38	16	35	28	37
2. Lack of an influential sponsor	39	35	25	36	33	31
3. Lack of support, encouragement from peers	63	28	8	46	38	16
4. Lack of support, encouragement from family	82	15	3	74	20	6
5. Personal characteristics and abilities incongruent with job demands	80	19	1	79	18	2
6. Lack of a professional network	32	49	19	17	46	37
7. Employers negative attitudes towards women	31	48	21	21	40	38
8. Conflict with husband's career	83	13	2	69	20	11

The sampled women used various strategies to overcome personal barriers. (See Table 3.) However, they used fewer strategies in job seeking. Most significant is that 45% of the women reported that they did not try developing/utilizing the "old girl" network (Table 4). However, a large majority did try to become professionally visible and to prepare and update an effective resume (93-97%).

Almost all of the sampled women (98-99%) used strategies developed to improve interviews at least part of the time (Table 5). A majority, although fewer women (71-74%) followed up with a thank you letter after the interview or negotiated terms of employment when offered a job (Table 6).

Individual comments on the strategies they used are also in Appendix E. One type of strategy not mentioned in the questionnaire but alluded to by the women a number of times was the emphasis on demonstrating competence in the present job. Excellent performance, maintaining effectiveness on current assignments, being an expert, working hard, and similar advice were given.

Table 3

Percent of Women Who Used  
Strategies to Overcome Personal Barriers

	No	Yes
1. Developing a more positive self-concept	13	86
2. Setting career goals and formulating a plan of action	16	84
3. Attending career training or development seminars	25	75
4. Improving professional image	7	93

Table 4

Percent of Women Who Used Strategies  
to Overcome Barriers in Job Seeking

	No	Somewhat/Sometimes	A lot
1. Enlisting influential sponsors	19	57	24
2. Becoming professionally visible	3	39	57
3. Careful preparation of letters of applications, which drew interest to one's qualifications	21	32	47
4. Preparation of effective resume and updating it	7	36	56
5. Developing/utilizing "old girl" network	45	36	19
6. Obtaining support from family	25	29	46

Table 5

Percent of Women Who Used Certain Strategies During Interview \*

	<u>No</u>	<u>Somewhat/Sometimes</u>	<u>A lot</u>
1. Presenting self-confidence	1	17	82
2. Anticipating and handling / stress questions effectively	1	17	82
3. Gathering basic information on district or organization, and using it during interview	2	30	67
4. Stressing strong points	2	12	85

\* Base does not include those who did not apply for positions.

Table 6

Percent of Women Who Used Certain Strategies After Interview \*

	<u>No</u>	<u>Somewhat/Sometimes</u>	<u>A lot</u>
1. Following-up with a thank you letter	26	27	47
2. Negotiating terms of employment (if offered a job)	29	42	29

\* Base does not include those who did not apply for positions.

The sampled women reported having actively sought 101 school administration positions on which they also provided usable data on the districts. Unfortunately, the women did not provide complete data on the other positions they applied for. Therefore, the data on the positions sought and the characteristics of the districts were affected.

Primarily the women sought the position of superintendent (42%), followed by assistant superintendent (27%). More than half of the positions for which the women applied were in smaller districts with 10,000 or fewer students and 10 or fewer schools. (See Table 7.)

Table 7  
Types of Positions Sample Women Applied For

<u>Position</u>	<u>%</u>
Principal	10
Area or Central Office Administrator	20
Assistant/Deputy/Associate Superintendent	27
Superintendent	42

However, this is consistent with the size distribution of districts in the country. A survey by Market Data Retrieval (1981) shows that approximately 50% of the school districts in the country have less than 3,000 students.

Most of the districts have both elementary and secondary schools. About half of the districts (52%) have large numbers of minority students (50% or more). The districts are also in large part suburban (55%), and most of the school boards (94%) have at least one woman member. (See Table 8)

Table 8

## Some Characteristics of Districts Where Women Applied for Jobs

<u>District Characteristics</u>	<u>% of Applications</u>
1. Number of Students	
a) less than 5,000	41
b) 5,000 - 10,000	28
c) 11,000 - 20,000	12
d) 20,000 - 99,000	13
e) 100,000 or more	6
2. Type of Schools	
a) Elementary	15
b) Secondary	4
c) K-12	81
3. Students' Ethnicity	
a) 90% or more White	48
b) 50% White, 50% minority	38
c) Less than 50% White	6
d) Less than 10% White	8
4. Geographical Location	
a) Rural	18
b) Urban	27
c) Suburban	55
5. Number of Schools	
a) less than 5	18
b) 5 - 10	38
c) 11 - 20	15
d) 21 - 99	18
e) 100 or more	10
6. Women Participation on School Board	
a) no woman on school board	6
b) 1 woman on school board	25
c) 2 women on school board	39
d) 3 or more women on school board	29

Data on district characteristics were further examined to determine whether districts with certain characteristics provided job offers to the women applicants. The results show no evidence that specific district characteristics were related to job offers.

The sampled women's personal characteristics generally were unrelated to job offers, with the exception of age. More than any other group, those women 36-45 years old received the most job offers. (See table 9.) (Rank order  $r = -.26$ ;  $p < .01$ .)

Table 9

Percent of Job Offers Received by Women  
in Each Age Group

Age	Below 36	36-45	46-55	55 and above
Percent of Total Job Offers	*	70	40	33

\* only one job offer was reported for this age group.

## RESULTS

### PART II

#### FOLLOW-UP OF THE 75 AASA TRAINEES

The majority, or 45 of the 75 women (60%), achieved upward career mobility. In 1977, the trainees included six administrative or executive assistants, 14 principals, three area administrators, two central office administrators, 29 assistant superintendents, and three administrators in private educational agencies.

In the fall of 1982, three of the six administrative assistants were principals, and one had become a central office administrator. Three of the 14 former principals had become assistant superintendents, while one had become a superintendent. Seven of the 20 former central office administrators became assistant superintendents; nine former assistant superintendents became superintendents. (See Table 10.)

Although some of the trainees hold the same job titles, oftentimes they have moved to larger school districts or larger schools.

Some of the women moved outside education with tremendous success. One participant, an assistant superintendent for finance four years ago, became vice-president of a large midwest manufacturer.

A former deputy associate superintendent left education in June 1978 to join the Internal Revenue Service, first as assistant director in the state of Washington, then as assistant regional commissioner based in Atlanta, Georgia. In the fall of 1981, she was the only black female in the IRS Senior Executive Service.

A former assistant superintendent of Cook County Schools in Illinois became assistant commissioner for public affairs, in the U.S. Department of Education. Then, she became director of the Chicago Labor Institute, a non-profit organization engaged in the development of the arts, entertainment, and media industry in Chicago.

Table 10

## Previous and Current Positions of the Ford Foundation Trainees

Previous Positions	No.	Retired	Adm/ Exec. Asst.	Prin.	Central Office Adm.	Asst. Supt.	Supt.	Higher Ed.	Adm. in Ed. Agency	Govern- ment	Private Industry
Adm/Exec. Assistant	6		1	3	1						1
Principal	14			6	1	3	1	2			1
Area Administrator	3			1		1	1				
Central Office Administrator	20				8	7		2		1	2
Asst. Supt.	29	1				13	9	1	1	2	2
Adm. In Private Educa- tion Agency	3								2		1
Totals	75	1	1	10	10	24	11	5	3	3	7

A former director of Leadership Training Programs for the Washington, D.C., Public Schools became a supervisory program analyst for the Program Planning Division of the Washington, D.C., Department of Employment Services.

Others not working inside school districts but still in education included a regional education director, a deputy executive director of a state school boards association, a training director at a university, and assistant professors.

Of the 30 women who did not move up in their careers, 12 chose not to seek other jobs. Their reasons were varied. Given the realities, expectations, and perils of the superintendency, at least two women felt the superintendency was not for them, at least for awhile.

The most commonly named external barrier to upward mobility was resistance from other persons in the community. For example, one woman cited "board members who favor males." Another woman told of two physicians who took ads in the local paper protesting a woman's selection as high school principal because of her "elementary" background. (That woman later rejected the job offer.) One female applicant remembered what community executives told her: "Not many women have the position and salary that you do - why do you want more?" The women also mentioned that some superintendents' wives have a great deal of anxiety about their husbands hiring women administrators and some women administrators "who do not want women in top positions."

The second most commonly mentioned external barrier was the lack of central office administrative experience which many positions required. This requirement presented problems for principals and area administrators. (See Appendix E.) Those women who did not undergo AASA training also reported facing these same barriers.

Few internal barriers were cited. The barrier cited most often was lack of geographical mobility. Since nearby opportunities are often limited, the lack of geographical mobility strongly affected the women. In fact, only three women made more than ten job applications in the last four years; the majority made less than five active inquiries for higher level positions; and of those who changed jobs, only four ventured to move to another state.

Comments from the women can, perhaps, best sum up the results of the AASA training:

"Being selected (to the workshop) validated my credentials among colleagues, particularly my own superintendent. I was taken seriously from that time on."

"The experience boosted my confidence 110 percent. I began to see myself in a new role. Consequently my professional behavior was altered."

"The content of the seminar provided valuable 'inside information' on expectations of the superintendent."

"The women I met . . . provide a nucleus for a network. I feel as though I have a friend in almost every state. I have called on many of them."

"The seminar and other information provided by AASA have been very helpful in my upward mobility."

The women said the workshop greatly enhanced job seeking skills, taught one to negotiate and "was one of the most beneficial experiences of my life." One woman even declared that the workshop directly resulted in her obtaining two higher level positions in the last four years.

## RESULTS

### PART III

#### DIFFERENCES BETWEEN TRAINEES AND NON-TRAINEES

The study compared the AASA trainees and the non-trainees through the use of t-tests. These comparisons were useful for two reasons: 1) to determine how comparable the two groups were before the training, because differences logically would affect upward career mobility; and 2) to identify the two groups' differences could provide clues regarding the impact of the AASA training program.

#### Professional Qualifications

The AASA-trainees and the non-trainees had the same level of education. However, as expected, the AASA trainees had higher ratings on position and responsibilities, administrative aspirations, clarity of expression, and types of job experiences. The two groups' rated the same for letters of reference and in opportunities for making presentations. (See Table 11.)

#### Barriers To Upward Career Mobility

The two groups, trainees and non-trainees, encountered the same degree of internal barriers four years ago. They expressed encountering either no barriers or only sometimes encountering role conflicts, lack of assertiveness, lack of self-confidence, reluctance to take risk, lack of motivation in pursuing career goals, or low professional perseverance in pursuing career goals. Neither the trainees nor the non-trainees showed any distinguishable change regarding internal barriers over the four-year period.

However, the trainees and non-trainees did differ in their responses to questions on external barriers. Although the two groups recalled facing some external barriers four years ago, the AASA trainees said that they currently experienced these external barriers to a lesser degree. (See Table 12)

Table 11

Professional Qualifications Ratings of  
AASA Trainees and Non-Trainees

Professional Characteristics	Trainees		Non-Trainees		Range of Values	p-Value for t-test
	Mean	S.D.	Mean	S.D.		
Education	3.8	.4	3.7	.6	1-4	.45
Position & Responsibilities	4.1	.4	3.6	.6	2-5	.0001
Administrative Aspirations	4.2	.5	3.9	.4	2-5	.01
Clarity of Expression	4.2	.4	3.7	.5	2-5	.0001
Types of Job Experiences	4.2	.4	3.6	.4	2-5	.0001
References	4.3	.5	4.3	.4	2-5	.93
Opportunities for Presentations	4.0	.6	3.8	.6	2-5	.11

Table 12

Internal and External Barriers Faced by  
AASA Trainees and Non-Trainees

Barriers	Trainees		Non-Trainees		Range of Values	p-Value for t-test
	Mean	S.D.	Mean	S.D.		
Internal Barriers Faced Four Years Ago	9.9	2.7	9.8	2.6	7-20	.87
Internal Barriers Faced Today	8.5	1.7	8.8	1.8	7-14	.53
External Barriers Faced Four Years Ago	13.6	3.2	14.6	2.7	8-20	.18
External Barriers Faced Today	11.5	2.4	14.0	3.0	8-19	.001

The external barriers currently experienced are lack of an influential sponsor, characteristics and abilities incongruent with job demands, lack of professional network, and conflict with husband's careers. Both groups expressed the same difficulty on lack of female role models, lack of support and encouragement from peers, lack of support and encouragement from family, and employers' negative attitudes towards women.

#### Strategies For Upward Career Mobility

Both AASA trainees and non-trainees used strategies to overcome barriers to upward career mobility to about the same degree. These strategies were used in their personal lives, in job seeking, during the interview, or after the interview. (See Table 13.)

Table 13

Strategies Used By AASA Trainees and Non-Trainees to  
Overcome Barriers to Upward Career Mobility

Strategies	Trainees		Non-Trainees		Range of Values	p-Value for t-test
	Mean	S.D.	Mean	S.D.		
Changes in Personal Life	7.4	1.0	7.5	.7	4-8	.64
Job Seeking	13.4	2.8	13.2	2.7	7-18	.73
Interviewing	11.3	1.0	10.8	1.6	7-12	.15
After the Interview	4.1	1.3	4.3	1.1	2-6	.63
Total	36.7	4.1	36.4	4.2	27-44	.79

41

## RESULTS

### PART IV

#### FACTORS RELATED TO UPWARD CAREER MOBILITY

In order to determine the factors related to upward career mobility, regression methods were used. As mentioned earlier, three criteria were used to measure upward career mobility. The career growth criterion is a continuous variable, thus the general linear model, as provided in the Statistical Analysis System (SAS) procedure, was utilized. For the dichotomous criterion variable (superintendent or non-superintendent) and type of position criterion (which may be considered a nominal variable) the SAS stepwise discriminant analysis procedure was employed.

In both the general linear model and discriminant analysis procedures, the effects on the criterion that were due to the professional qualifications ratings, i.e. types of job experiences, of the the AASA trainees and non-trainees (and where differences were evident) were partialled out first. Consequently, the relationship between the AASA training and the criterion variables could be independently evaluated. The variables were also entered into the regression models according to their chronological order of occurrence.

There are at least four predictor variables whose contribution to the dependent variable, career growth, are statistically significant ( $p < .05$ ). These are age (which understandably has an inverse relationship with career growth), and ratings on administrative aspirations, clarity of expression, and types of job experiences. Ratings on clarity of expression and types of job experiences are more strongly related to career mobility than the ratings on administrative aspirations. The rest of the predictor variables, in the order of the magnitude of their contribution to the career growth criterion, are: marital status, ethnicity, reference letters rating, AASA training, rating on evidence of opportunities for making presentations, external barriers encountered, rating on position and responsibilities, number of children, strategies used in job seeking, internal barriers encountered, and whether there were children below 18. The incremental sums of squares of each variable in this group contribute to the prediction of career growth, but individually fail to reach statistical significance. The variance explained by all the variables of the model in the dependent variable amount to 37 per cent ( $p = .003$ ) (see Table 14).

Table 14

General Linear Model Results Using  
Career Growth as Dependent Variable

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE
MODEL	21	32.61	1.74	2.36
ERROR	84	61.93	0.74	PR > F
CORRECTED TOTAL	105	98.54		0.0030
R-SQUARE	C.V.	STD DEV		
0.371531	44.40	0.86	1.93	

SOURCE	DF	SS	F VALUE	PR > F
Age	1	6.89	9.35	0.003
Ethnicity	4	3.17	1.08	0.37
Marital Status	3	3.89	1.76	0.16
Number of Children	1	0.38	0.51	0.47
With Children Below 18	1	0.33	0.04	0.83
Education	1	0.37	0.51	0.48
Position & Responsibilities Rating	1	0.80	1.08	0.30
Administrative Aspirations Rating	1	2.82	3.83	0.05
Facility of Expression Rating	1	6.10	8.28	0.005
Experiences Rating	1	5.06	6.87	0.01
References Rating	1	2.46	3.34	0.07
Presentation Rating	1	1.43	1.95	0.17
AASA Training	1	1.92	2.61	0.11
Internal Barriers	1	0.03	0.05	0.83
External Barriers	1	0.99	1.34	0.25
Use of Strategies	1	0.23	0.32	0.58

Somewhat different results were obtained when type of position was used as a criterion for upward career mobility. The positions were categorized into superintendent, assistant/associate/deputy superintendent, central office administrator, area administrator, position in higher education, position in government agency, and position in private industry. Two variables were found to have a strong relationship with the type of position the sampled women now hold. Not surprisingly, the sampled women's position and responsibilities ratings (based on their resumes four years ago) have the most influence on the type of position they presently occupy. The common variance between the two amounted to 24 percent. The second most dominant variable which influence the type of position the women presently hold is whether they are AASA trainees or non-trainees. AASA training has a common variance of 12 percent with present type of position. To clarify this result, it should be noted that approximately 10 per cent of the AASA trainees moved to private industry as corporate managers, or in some other administrative capacity. On the other hand, only one (.3 percent) of the non-AASA trainees moved to private industry. An additional 12 percent of the AASA trainees left school administration to become university professors, be top administrators in educational agencies, or hold high positions in the federal government. None of the non-trainees moved to either of the latter types of positions (see Table 15).

Table 15

Discriminant Analysis Results Using  
Present Type of Position as Dependent Variable

STEPWISE SELECTIONS: STEP 1

STATISTICS FOR ENTRY, CF = 6, 96

Variable	R**2	F	PROB > F	TOLERANCE
Age	0.01	0.19	0.98	1.0
Number of Children	0.03	0.52	0.79	1.0
With Children Below 18	0.11	1.94	0.08	1.0
Education	0.04	0.75	0.61	1.0
Position and Responsibilities Rating	0.24	5.17	0.0001	1.0
Administrative Aspirations Rating	0.04	0.59	0.74	1.0
Facility of Expression Rating	0.18	3.49	0.003	1.0
Experiences Rating	0.19	3.73	0.002	1.0
References Rating	0.09	1.68	0.13	1.0
Presentation Rating	0.06	1.02	0.41	1.0
AASA Training	0.22	4.56	0.0004	1.0
Internal Barriers	0.08	1.46	0.20	1.0
External Barriers	0.06	1.11	0.36	1.0
Use of Strategies	0.04	0.75	0.61	1.0

MULTIVARIATE STATISTICS

WILKS' LAMBDA = 0.76	F(6, 96) =	5.173
	PROB > F =	0.0001
PILLAI'S TRACE = 0.24	F(6, 96) =	5.173
	PROB > F =	0.0001

AVERAGE SQUARED CANONICAL CORRELATION = 0.04

STEPWISE SELECTION: SUMMARY

STEP	VARIABLE ENTERED	REMOVED	NUMBER IN	PARTIAL R**2	F STATISTIC	PROB > F
1	Position & Responsibilities Rating		1	0.24	5.173	0.0001
2	AASA Training		2	0.12	2.263	0.0438

A new twist in the behavior of the variables is seen when the superintendency is used as a criterion in the discriminant analysis. Reference letters ratings, and the degree to which women encountered internal barriers, become statistically significant predictors. However, the correlation of these two variables with obtaining a superintendency is not as strong as the correlation of AASA training with the type of position presently held by the sample women (see Table 16).

Table 16

Discriminant Analysis Results Using the  
Attainment of the Superintendency as Dependent Variable

STEPWISE SELECTIONS: STEP 1

STATISTICS FOR ENTRY, DF = 1, 105

Variable	R**2	F	PROB > F	TOLERANCE
Age	0.002	0.21	0.65	1.0
Number of Children	0.001	0.12	0.73	1.0
With Children Below 18	0.011	1.18	0.28	1.0
Education	0.01	1.29	0.26	1.0
Position and Responsibilities Rating	0.04	4.09	0.05	1.0
Administrator Aspirations Rating	0.007	0.72	0.40	1.0
Facility of Expression Rating	0.04	4.88	0.03	1.0
Experiences Rating	0.03	3.27	0.07	1.0
References Rating	0.08	8.60	0.004	1.0
Presentation Rating	0.01	1.05	0.31	1.0
AASA Training	0.01	1.12	0.29	1.0
Internal Barriers	0.03	3.87	0.05	1.0
External Barriers	0.03	2.77	0.10	1.0
Use of Strategies	0.004	0.46	0.50	1.0

MULTIVARIATE STATISTICS

WILKS' LAMBDA = 0.92	F(1, 105) =	8.60
	PROB > F =	0.004
PILLAI'S TRACE = 0.08	F(1, 105) =	8.60
	PROB > F =	0.004

AVERAGE SQUARED CANONICAL CORRELATION = 0.08

STEPWISE SELECTION: SUMMARY

STEP	VARIABLE	ENTERED	REMOVED	NUMBER IN	PARTIAL R**2	F STATISTIC	PROB > F
1	References Rating			1	0.08	8.60	0.004
2	Internal Barriers			2	0.05	6.04	0.015

## Discussion

This report would be incomplete if it did not probe further into the ramifications of the results. Certainly, certain significant correlations and the lack of others need further elaboration.

First, a caveat is necessary in interpreting the results. The study has a sample of 106 women in a highly dynamic environment. This should be kept in mind in assessing the generalizability of the results to all women administrators.

Contrary to expectations, some variables did not significantly predict the sample women's upward career mobility. Specifically, level of education and expertise, according to the study, are not related to upward career mobility. However, 85% of the women in the sample already had doctoral degrees, 92% had expertise in administration and 59% had expertise in curriculum development. The effects of educational background on upward career mobility could not become statistically significant unless a sizable part of the sample have lesser qualifications.

The predictive ability of barriers and strategies may also have been affected by the lack of variance in the data. The group of women in the study are homogeneous not only in terms of their education, but to a certain extent, also in the degree to which they encountered internal barriers and the strategies they used in their quest for upward career mobility.

The qualifications of the women in this study support the contention (as previous studies have shown) that there is an abundance of well qualified, underemployed women ready to take on greater responsibilities in the central office as assistant/associate superintendents and as superintendents. A recent survey revealed that only about 2% of the superintendents and 9% of the assistant/associate/deputy superintendents are women, and only 25% of all school administrators and 16% of principals are women (Jones and Montenegro, 1982).

Personal factors, such as marital status, number of children, and ages of children did not significantly affect upward career mobility. It is possible that the women involved have overcome barriers associated with marriage and children. In fact, 82 percent have indicated that they did not experience lack of support or lack encouragement from their families.

Although internal barriers generally did not significantly affect upward career mobility, at least one barrier, lack of geographical mobility, contributed significantly to the attainment of the superintendency. Geographical mobility often is a precondition that superintendents or aspiring

superintendents, in the manner of corporate managers, usually accept as part of their careers.

The one internal barrier that the women did not succeed in overcoming was confusion over life's goals. The women did not report any change over the four year period in overcoming this barrier.

The aspiring women themselves do not escape part of the responsibility in their lack of career mobility. As stated earlier, 16% of both trainee and non-trainee groups did not seek and did not move to higher level administrative positions. Four percent of the AASA trainees indicated a lack of geographical mobility, by force or by choice. Of those who sought higher level positions, only three sought more than ten positions in the last four years. This is consistent with previous findings that most women, even those with the administrative credentials, apply for administrative jobs less often than men do (Schmuck, 1975; Krchniak, 1978). Certainly, the aspiring women involved could expend more effort in this area. On the other hand, it may be recalled that there are sample women who have high level administrative positions and are locked in their districts in small cities. Their lack of geographical mobility precludes them from applying for positions outside their districts, and their present districts certainly are not replete with administrative vacancies.

The adage, however, that women administrators tend to be in smaller districts is not clearly supported in the survey results. In the results, it was noted that 41% of the applications made by the women were to districts with less than 5,000 students. Fifty-six percent of the applications were to districts with 10 schools or less. In comparison, a 1980-81 survey of AASA men and women members showed that 43% work in districts with less than 2,500 students. It is unclear whether the women applied to smaller districts because they believed they stood a better chance in these districts or whether smaller districts generally are more receptive to hiring women administrators. A 1982 survey showed that 71% of women superintendents are in districts with student populations of less than 2,500 (AASA, 1982). In the present study, there was no significant relationship between size of district and a job offer.

Although the sample women named external barriers more than internal barriers, the effects on upward career mobility were not all significant. Some of the women clearly used strategies effectively to combat these barriers. Among the AASA trainees, some of those who became locked in their present positions went to other fields and achieved upward mobility.

A major factor, however, seems to emerge as instrumental in the women's upward career mobility, on the premise that they are at that point where they have the aspirations and the educational and professional qualifications for high level administrative positions. This factor has to do with the opening of institutional blocks. The sponsorship of a national organization certainly is desirable. This sponsorship requires universal acceptance in order to obtain optimum benefits.

Kanter and Wheatley (1978) offered some useful and relevant insights with respect to the AASA training program. They claim that although participants derive benefits from training programs, at best these programs mostly provide a spurt of energy which propel women to new positions; and that long term effects on careers and career success are determined by the jobs people have previously held.

Thus ". . . it seems less important today to boost women's aspirations than to find ways to feed into the pipeline and move up the ranks those women who have already discovered their ambitions so we are led away from the question of individual talent development in a vacuum to the question of how to open institutional channels that block or slow down the progress of women."

Through its organizational network, and through the Office of Minority Affairs, AASA has done precisely the type of activity that Kanter & Wheatly discussed. The AASA trainees obtained more than training, because a network was established for them and this professional network was a strategy which the trainees found to be useful in removing an external barrier to upward career mobility. It may also be shown that the trainees did not make most of their progress during the first year. During the past year, at least 16 of the trainees obtained promotions.

The Office of Minority Affairs also extended support to women members and even non-members who asked for assistance, including the non-trainees themselves. The assistance provided to the non-trainees was in fact a variable which could not be controlled, and which obscured the comparisons in upward career mobility between the trainee and non-trainee groups.

## CONCLUSIONS

- o The AASA training decreased the degree to which the trainees faced external barriers in their search for upward career mobility. The change in external barriers faced by these women was particularly true with respect to lack of an influential sponsor, personal characteristics and abilities incongruent with job demands, and a lack of a professional network.
- o The AASA training paved the way to career change, as evidenced by the move of approximately 22 percent of the trainees to other occupations outside of school district administration.
- o Clarity of expression and types of job experiences, as rated from the sample women's resumes, are strongly related to career growth, as measured by the number of higher level positions attained in the past four years.
- o Women who are rated highly on the basis of their letters of reference, and those who encounter less internal barriers tend to obtain the superintendency.
- o The women in the study perceive more external rather than internal barriers in their careers. The greatest external barriers are employers' negative attitudes, lack of an influential sponsor, and lack of a professional network.
- o The greatest internal barrier that the women in the study perceive remain to be conflict or confusion regarding life goals. However, lack of geographical mobility and failure to apply for more jobs are barriers which women also need to overcome. Although the women have high aspirations and claim high professional perseverance, most actively sought few higher level positions over a four year period.
- o Over a four-year period the women made progress in overcoming the internal barriers they had previously perceived as applicable to them.

Appendix A

The Questionnaire

RESEARCH ON WOMEN'S EQUITY  
AMERICAN ASSOCIATION OF SCHOOL ADMINISTRATORS

I. Background Information

Name: \_\_\_\_\_

Current Position: \_\_\_\_\_

Age:  Below 36  36-45  46-55  Over 55

Ethnicity:

American Indian  
 Asian

Black  
 Hispanic

White  
 Other (please specify)

Marital Status:  Married  Single  Divorced/Widowed

Number of Children: \_\_\_\_\_ Their Ages: \_\_\_\_\_

Highest Degree Earned:

Bachelor's  Master's  Master's + 30 hrs. (or specialist)  Doctorate

Level of Specialization:

Early Childhood  
 Elementary  
 Middle

Secondary  
 College or Higher Education  
 Other (please specify)

Present Areas of Expertise:

Administration  
 Budget/Finance  
 Career Education  
 Community Education Involvement  
 Competency Education/Testing  
 Curriculum Development  
 Early Childhood  
 Education Facilities Planning  
 Education of the Gifted  
 Evaluation

Grantsmanship/Proposal Writing  
 Multicultural Education  
 Personnel Relations/Negotiations  
 Public Relations  
 Reading Effectiveness  
 Research Design & Analysis  
 Special Education  
 Staff Development  
 Other (please specify)

Since December 1977, how many higher level administrative positions have you actively sought (including promotions)? \_\_\_\_\_

How many job offers did you receive? (Including the jobs you held.) \_\_\_\_\_

At present, how do you rate yourself professionally?

Very successful  Moderately successful  Still trying to get there

Please explain \_\_\_\_\_

II. Below is a list of barriers commonly encountered by women in their upward career mobility. Please identify the barriers which are applicable to you by marking the appropriate space on the right. Please also try to recall whether these barriers were applicable to you 4 years ago (as of December 1977):

	TODAY			FOUR YEARS AGO		
	No	Some- what/ Sometimes	A Lot	No	Some- what/ Sometimes	A Lot
<b>A. Internal Barriers</b>						
1. Personal anxieties about being a wife-mother and being a career woman	_____	_____	_____	_____	_____	_____
2. Conflict or confusion regarding life goals	_____	_____	_____	_____	_____	_____
3. Lack of assertiveness	_____	_____	_____	_____	_____	_____
4. Lack of self-confidence	_____	_____	_____	_____	_____	_____
5. Reluctance to take risk	_____	_____	_____	_____	_____	_____
6. Lack of motivation (in pursuing career goals)	_____	_____	_____	_____	_____	_____
7. Low professional perseverance (in pursuing career goals)	_____	_____	_____	_____	_____	_____
<b>B. External Barriers</b>						
1. Lack of female role models	_____	_____	_____	_____	_____	_____
2. Lack of an influential sponsor	_____	_____	_____	_____	_____	_____
3. Lack of support, encouragement from peers	_____	_____	_____	_____	_____	_____
4. Lack of support, encouragement from family	_____	_____	_____	_____	_____	_____
5. Personal characteristics and abilities incongruent with job demands	_____	_____	_____	_____	_____	_____
6. Lack of professional network	_____	_____	_____	_____	_____	_____
7. Employers' negative attitudes towards women	_____	_____	_____	_____	_____	_____
8. Conflict with husband's career	_____	_____	_____	_____	_____	_____

C. Please cite other barriers or write your comments: \_\_\_\_\_

III. There are ways or strategies which women use to overcome barriers to their upward career mobility. Please indicate on the right whether you have used these strategies during the past four years:

	<u>No</u>	<u>Yes</u>	
<b>A. In Your Personal Life</b>			
1. Developing a more positive self-concept	_____	_____	
2. Setting career goals and formulating a plan of action	_____	_____	
3. Attending career training or development seminars	_____	_____	
4. Improving professional image	_____	_____	
<b>B. In Job Seeking</b>			
	<u>No</u>	<u>Somewhat/Sometimes</u>	<u>A Lot</u>
1. Enlisting influential sponsors	_____	_____	_____
2. Becoming professionally visible	_____	_____	_____
3. Careful preparation of letters of application, which drew interest to your qualifications	_____	_____	_____
4. Preparation of effective resume, and updating it	_____	_____	_____
5. Developing/utilizing "old girl" network	_____	_____	_____
6. Obtaining support from family	_____	_____	_____
<b>C. During The Interview</b>			
1. Presenting self-confidence	_____	_____	_____
2. Anticipating and handling stress questions effectively	_____	_____	_____
3. Gathering basic information on district or organization, and using it during interview	_____	_____	_____
4. Stressing strong points	_____	_____	_____
<b>D. After The Interview</b>			
1. Following-up with a thank you letter	_____	_____	_____
2. Negotiating terms of employment (if offered a job)	_____	_____	_____
<b>E. Please cite other strategies used or write your comments:</b>			

IV. In order for us to determine the hiring patterns of districts with respect to sex, we need to obtain information regarding your job seeking experiences. Please start with your latest application, including the district where you are currently employed, and end with the district where you were employed in 1977. Extra copies of this section are enclosed if you need them.

-----  
Application Date \_\_\_\_\_

Position applied for \_\_\_\_\_

District \_\_\_\_\_ State \_\_\_\_\_

Did you have an interview? \_\_\_\_\_ yes \_\_\_\_\_ no How many times? \_\_\_\_\_

By whom? \_\_\_\_\_

Did you receive a job offer? \_\_\_\_\_ yes \_\_\_\_\_ no

What was the yearly salary offered/obtained? \_\_\_\_\_

District characteristics:

\_\_\_\_\_ District type (example: K-12) \_\_\_\_\_ Rural \_\_\_\_\_ Urban \_\_\_\_\_ Suburban  
\_\_\_\_\_ Estimated number of students \_\_\_\_\_ Number of schools in district  
\_\_\_\_\_ Number and type of schools

Ethnic make-up of students (ex: 50% minority, 50% white) \_\_\_\_\_

For your area, is the socioeconomic status of your district considered \_\_\_\_\_ lower, \_\_\_\_\_ middle or \_\_\_\_\_ upper class?

School board characteristics:

Was the school board \_\_\_\_\_ elected or \_\_\_\_\_ appointed?

What was the women to men ratio on the school board (example: 2:3, or 2 women and 3 men)? \_\_\_\_\_

How many of the school board members were:

\_\_\_\_\_ higher education academicians; \_\_\_\_\_ elected officials;  
\_\_\_\_\_ non-elected community leaders; \_\_\_\_\_ public school administrators;  
\_\_\_\_\_ other (please specify) \_\_\_\_\_

Please cite two outstanding problems of the district:

1. \_\_\_\_\_

2. \_\_\_\_\_

Appendix B

The Evaluation Form

Evaluation Form  
(Instructions)

Research Project on Women School Administrators

Please rate the resumes and other application materials on a 5 point scale (5 being the highest), based on the criteria below. One Rating Sheet should be used for each person.

1. Present Position . . . people who were already in administrative positions with authority were given more points than those in supervisory or administrative positions with less responsibility . . . we considered not only the position but the job description as well.
2. Future Aspirations in Administration . . . people who were able to describe their administrative goals and objectives were given more points than those who were vague about their future.
3. Clarity of Expression . . . candidates who were able to express themselves in writing were given more points than those who were less professional in their written expression.
4. Types of Job Experiences . . . a candidate who had a variety of experiences, from classroom teacher, up through the ranks, indicated a sense of purpose and drive . . . too many years in one position might not be as good for a candidate as a steady move up the ranks.
5. References . . . strong recommendations from administrators and information about the candidate and her ability to work with people in a positive way.
6. Evidence of the Opportunities the Candidate had for Making Presentations . . . budget presentations, in-service workshops, faculty meetings . . . a candidate should be able to think on her feet and express herself well.

Evaluation Form  
(Rating Sheet)

Research Project on Women School Administrators

Name: \_\_\_\_\_

Evaluation Criteria

Number of Points

1. Present position and responsibilities . . . . .
2. Future aspirations in administration. . . . .
3. Clarity of expression . . . . .
4. Types of job experiences. . . . .
5. References. . . . .
6. Evidence of opportunities for  
making presentations . . . . .

Appendix C.

Reasons Given by Women for Perceived Success

- o Salary over \$40,000.00, more than many superintendents.
- o Immediate level after superintendent (with 12 others) in the best school system in the U.S. which is receiving national accolades as such.
- o I have been able to expand the services provided to meet the special needs of students and adults needing English-as-a-second language as well as an Indian educational program.
- o My position as Coordinator for Secondary Education gives me the responsibility for the supervision and consultation with 27 high schools with a combined enrollment of 20,700 students. I have held the position for 5 years and have fine recommendations from my superintendent, fellow workers, principals, and teachers. I have been on the Committee of Nonpublic Schools of NASSP, the Secondary Committee of NCEA, board member of the University for Young Americans, the advisory boards of universities and colleges. I have also given many presentations to conventions and principal groups over the past 8 years.
- o I have the highest achievement (average) for my city.
- o I am assistant superintendent in a fairly large district. I am considered extremely competent and am paid much better than most superintendents.
- o I think I have sharpened my administrative skills so I am able to stay in the role of principal, which I enjoy, but also assume district-wide responsibilities for special education programs.
- o I have attained the goal of Superintendent and have been successful. However, I am ready for some new challenges - a district with a larger enrollment.
- o The position I hold is in a large (20,000 student enrollment) district and I did not seek it! I am working in an area of my training, experience and desire.
- o I have been very successful but at present have decided to take some time off to reflect, read and reassess.
- o I was appointed to my first superintendency a year ago. After five months in the position, a federal judge ordered my district to merge with four other school districts for the purpose of integrating a predominately black school district. My present position is now Assistant Superintendent and I am still trying to get another superintendency.

- o I felt confident enough that I would be offered a superintendency or assistant superintendency that I re-evaluated my personal goals and retired to write! I role modeled for others for 10 years. Hope it helped.
- o I have always been rated "outstanding" in all of my positions.
- o I currently hold the one position I applied for since 1977-Assistant Superintendent. I held the presidency for the state Association of School Personnel Administrators during 79-80, 80-81. I'm very active in the state Association of School Administrators and currently I chair the midwinter conference. I've acted as a resource person in health wellness programs. I will be looking for a superintendency in the near future.
- o I left the field of Education in June, 1978 to begin a career as an executive in the Internal Revenue Service. I am currently the only black female in IRS' Senior Executive Service! IRS has a workforce of approximately 88,000 nationwide.
- o I hold a top executive position in the organization, salary is excellent and benefits are excellent.
- o When I first applied for an administrative position (8 years ago), I had to interview 17 times for a job offer. (Recently, one interview resulted in a job offer.)
- o Salary at \$48,500; no major conflicts; good working relationship with Board of Education; came in "second" on three job searches for promotion transfer to larger district.
- o I have been given strong validation by peers and those in the highest levels of administration. I've been strongly urged to apply for superintendency positions. I have additionally felt extremely good about the work I do and have performed.
- o I have had much "success" feedback via my peers and superiors. I have sought and gained that which I wished.
- o I enjoy my job tremendously and am very well paid by a district which is outstanding and located in one of the 10 "most livable" cities in the U.S.
- o Professional career has advanced steadily with excellent experience.
- o Present position provided many opportunities and is

- excellent for fine-tuning skills required by a superintendent.
- o Each year I am given more responsibility and outstanding evaluations.
  - o Reached my goal as Superintendent; left that position with 2 years remaining on my contract to accept full professorship, top of the salary schedule, in Educational Administration, thereby reaching another goal. I am personally very happy and content. I love my students and am working on a school finance book.
  - o I feel very successful in the present assignment, but the challenge of superintendent still interests me presently.
  - o My goal has been to become an Asst.-Supt. and I have reached it. Next step is a superintendency.
  - o I have never applied for a position other than my initial teaching position. Promotions have occurred within the school district with which I began. I have not desired to leave the city.
  - o Since December 77 - personal happiness has increased exponentially; income more than doubled, and I have been able to maintain/improve management level despite moving to two different states in the last two years.
  - o Have reached superintendency level, and at conclusion of first four years in this position, just concluded a contract for four more years with substantial increases guaranteed for each of three years (last one to be negotiated).
  - o I was recruited for the two most recent positions I have held which are Area Director of Instruction and Area Associate Superintendent. I feel I am prepared for and marketable for the position of superintendent.
  - o I have obtained my goal of becoming a public school superintendent with only five years of administrative experience.
  - o My present position was a significant promotion, and I am now one of only three women (16 men) on the Executive Staff of the State Superintendent of Public Instruction.
  - o The present position allows me to implement many of my administrative beliefs.
  - o I have never lost a job opportunity for which I applied -- i.e. I was hired every time.

- o Only woman in my capacity - youngest in this capacity; responsible for 4,000 students.
- o Satisfied with present position.
- o I was principal of a junior high school until it closed. I am now a District Administrator and I have won most meaningful awards, etc.
- o In my current role, I consider myself very successful.
- o Promoted to Assistant Superintendent in 1978, and interviewed by State College Board for position of President of state college.
- o Knowledgeable of job, success on job, recognition by others..
- o I feel I'm very successful as an administrator, but am unemployed because of a move to be nearer my husband's work.
- o I have the respect of peers, superiors, and people whom I supervise.

Appendix D

Reasons Given by Women for Perceived Lack of Success

- o Interested in securing administrative position in lieu of teaching.
- o I am continuing with the timeline established. It's difficult but not impossible.
- o My goal is to reach the superintendent's level.
- o I feel I am very effective in present responsibilities-but have had little opportunity to learn, grow, expand capabilities. Community is isolated. Superintendent has discouraged participation in professional organizations, attendance at conferences, workshops, county meetings. He has blocked professional advancement through damning by faint praise. Basically, my even considering myself eligible for a superintendency or a position with salary to or greater than that earned by the superintendent is a threat to him. I am punished. I feel trapped.
- o Am not trying presently to get "there."
- o Was in "full swing" with lots of options, enjoyed and pursued many alternatives - now taking a break to strengthen family. This is seen by some as a "stepback". I feel good about it but may have to take some costs from opinion of others.
- o I would consider myself "very successful" when I become a superintendent.
- o I do what I do very well and have national influence; have been a consultant repeatedly all over the country, but this appears to be a dead end.
- o Still trying for a superintendency.
- o My work is challenging, I enjoy it but I must focus on future career goals.
- o Would still like to be a superintendent.
- o I see very little avenue for advancement.
- o I was on an "up" trend; a few setbacks (professionally) have occurred. The job market looks somewhat hazy. I am now working on a complete career change.
- o I manage million dollar training programs; would however like mobility in human resource development.
- o I'm eager to assume a superintendency, but lack geographic mobility, and find that County is slow to accept women in

the role of district leader. We have one female superintendent in the County (51 districts).

- o My goal is to be the decision-maker at some point, not always second in command.
- o I am in the process of applying for a position as Superintendent of a school district. I recently received a letter of invitation from that School Board.
- o Mobility is a problem.
- o I am still searching for ways to utilize my skills.
- o There is not one female commissioned officer in the 17 school districts in our Intermediate Unit. In fact, myself and one other female are the only central office females in the I.U. and 17 school districts.
- o This position may be eliminated in the re-authorization of P.L. 94-482.
- o Eight months ago, I changed careers from education to the corporate world. I recently resigned from my position as manager-accounts control for a brokerage firm. Before my resignation I would have considered myself very successful.
- o I was appointed to this job in August of 1975. Because of fiscal austerity and declining enrollment, it is about to be abolished and I am not eligible for transfer in the system. Neither can I get another comparable job, because appointments have been from within the ranks of systems where I have applied.
- o I have not achieved superintendency yet but am satisfied with policy positions I have held.
- o Although my present position is relatively new, I do not consider it a promotion. Declining enrollment and consolidation of administrative jobs forced me to accept a lateral change. I enjoy my job and have been extremely successful in every position I have held. However, I have not been able to gain promotion for the past five years in spite of advanced training, outstanding recommendations and concentrated effort. Mobility was not a factor.
- o I would rate myself "moderately successful" since I have not attained the status professionally that I prefer.
- o My ultimate goal is a superintendency, but as yet I have not applied for this position.

- o I have not reached my goal of being a superintendent. Also, I do not have the full backup and support of my immediate boss.
- o As a woman and a Black, I have experienced some very real barriers to upward mobility. The prevailing attitude seems to be "you already have a professional job, what more do you want" or "How preposterous of you to have ambitions".
- o I still have much to learn in the "people skill" aspect of administration.
- o After raising five sons, four of whom are now in excellent colleges, 3 on 4-year ROTC scholarships, I taught for 7 years. The next 7 years were spent in a curriculum development position where I was very successful. Because of Reagan's fiscal cuts in education, my position was cut 1/2 time temporarily. I left the organization and have attacked a new administrative position. I am just learning the job, but I feel "sort-of" successful.
- o Geography and personal choices have limited me, temporarily, I hope. I have held two positions, but neither specifically in School Administration. (I am in higher education as a teacher).
- o I believe that I have accomplished as much as I can accomplish with a Master's Degree. To move to a larger school system, I believe I would need to have additional graduate work.
- o On leave to complete Ph.D. in administration.
- o "Still trying to get there," at this point, may not necessarily mean a superintendency. It could be other positions in the educational field. However, at the level of Associate Superintendent, it is not easy to see what the goal may be. A superintendency would be great though. With high expectations of self, one may never see oneself as "very successful".
- o Still trying for a superintendency.
- o I feel very successful in the present assignment, but the challenge of superintendent still interests me presently.
- o Still have an active placement file at \_\_\_\_\_. Still telling people (superintendents) that I'm interested in central office positions, i.e., Assistant Superintendent and or Director of Elementary Education.

Appendix E

Comments on Climbing the Ladder in School Administration

- o Have not sought other position because I am happy in my present position and feel I have a very positive impact in our system.
- o Four years ago, I was willing to make the "good flight," but as I mellow with age, it doesn't seem to be worth it. I shouldn't have to struggle for promotions after 20 years of demonstrated competence. Men don't.
- o There remains concern regarding females functioning successfully above the assistant superintendent level. Highly conservative community.
- o I "have" arrived. I will help others but I have dealt with many women who have literally been a "woman's own worst enemy."
- o Jobs at relatively high administrative levels in this state seem to be going to people from within the system or to people with political influence. They do not seem to be going to the best qualified applicants.
- o (I was) unable to secure superintendency because I did not have experience as building level administrator.
- ~~o Racism and sexism (are barriers to career mobility).~~
- o I am near enough to retirement that it would be difficult now to make a move at my salary level.
- o Barriers: community inacceptance of women in top administration; School Board negative attitudes toward women in top administration; lack of support from (state) association of school administrators.
- o The barriers are the same today (in state) as in 1977; School Boards (in state) are not willing at this time to appoint women to the superintendency.
- o This applies to other females in present organization: attitude of superintendent which takes "advantage" of female talent, commitment, etc. without recognition or assistance in professional advancement.
- o Retirement considerations restrict application (to state where presently employed).
- o The most significant barrier I've ever encountered, unfortunately, is other women administrators who do not want women in top positions.
- o Marital status (divorced and single) was significant in some communities.

- o I have not experienced too many barriers.
- o Males make the decisions about who will advance (particularly above them); also age may be a strong factor.
- o Really tough competition with experienced applicants (men!).
- o Need constant encouragement to females to take risks of visibility in assuming leadership roles in male dominated professional organizations.
- o Barrier: feeling that I have to move through all the chairs before being "eligible" for the top position.
- o I have encountered few barriers. Recently, in talking with a group of male superintendent friends in an informal situation, they shared that their wives had a great deal of anxiety about them hiring women administrators. This barrier needs to be addressed more openly.
- o Three of the four district superintendents appointed in the \_\_\_\_\_ area have been business managers. Two of the four districts had determined appointments prior to job postings.
- o My salary is just high enough that unless a position offers at least a \$6000 raise to accomodate cost of moving to new area - real estate inflation - I cannot afford to apply.
- o Male superiors appear to be threatened by a female subordinate possessing a Ph.D. and good management skills plus an excellent track record. The Board members also favor males - especially if your husband has a good job income. A divorced, single, or widowed female fares much better.
- o (There is) lack of access to flow of information regarding potential job vacancies - informal information not shared so readily with women as among men.
- o You can't get a foot in the central office door without central office experience - it's a vicious circle.
- o (There is) conflict of interest of a District Superintendent doing the search process and also approving the candidate selected by the Board. Use of criteria such as central office experience rules out female candidates.
- o (There is) resistance of selected males to female superiors.
- o School Boards are attempting to eliminate the Assistant Superintendent position in small school districts.

- o Jobs are not available locally - the market is dead.
- o Strive for excellent performance within the district where I am employed.
- o Perform job in an outstanding manner - giving much attention to positive staff interpersonal relations.
- o Personal contacts more important than formal application process (same is true for men).
- o Ford Foundation (training) helped much.
- o Preserve loyalty to current employer - performance & honesty.
- o The seminar and information provided by AASA have been very helpful in my upward mobility.
- o Present a highly professional appearance.
- o Always be yourself, don't be afraid to ask questions about job expectations. I zeroed in on a healthy, positive and growing school district rather than one overwhelmed with problems.
- o I was naive for not properly negotiating contract 3 years ago. That will never, never happen again! I have learned from male colleagues exactly what to do!
- o Present position allows me to "pick the brains" of my superintendent and to work closely with him and the Board of Directors.
- o Have developed more self-confidence on job and learned how to deal with the "old boys."
- o I purposefully set out in 1977 to obtain additional training (Ed.D.) to learn all I could about every aspect of education in the state; and to be "right" when I spoke - establish myself as an expert. I did.
- o Most of my jobs came to me rather than through my formal application for them.
- o When in the finals - I read all policy manuals and rules and regulations manuals - all newspapers over last 6 months - visited campuses - also studied state laws.
- o Maintain effectiveness on current assignments.
- o Read a number of management books and practiced the "how to" advice such as on the use of power strategies.

- o Prayed a lot!
- o Attempted to complete all regular and special assignments in an excellent manner.
- o Worked 10 times harder; everything due to the Lord.

## REFERENCES

- Abrams, J. D. From one who made it: Advice to women on their way up in school administration. The American School Board Journal, July 1978.
- Adkison, J. A. "Women in School Administration: A review of the research." Review of Educational Research, 1981, 51(3), 311-343.
- Brayfield, C. H. Social literacy education for women educators: Will it facilitate their entry into public school administration? (Doctoral Dissertation, University of Massachusetts, 1978). Dissertation Abstracts International, 1978, 39, 35 A.
- Burkhardt, C. M. Survival strategies for women administrators. Paper presented at the workshop on Women in Administration, 1979. (ERIC Document Reproduction Service No. ED 184 037).
- Campbell, D. T. and Stanley, J. C. Experimental and quasi-experimental designs for research on teaching. In N.L. Gage, (Ed.), Handbook of Research on Teaching, Chicago: Rand-McNally, 1963.
- Crosby, J. W. An exploratory study of women superintendents. Dissertation Abstracts International, 1973, 34, 3742 A.
- Darley, A. Big-time careers for the little woman: A dual-role dilemma. Journal of Social Issues. 1976, 32 (3), 85-97.
- Estler, S. E. Women as leaders in public education," Signs, 1 (1975), 363-385.
- Harris, E. S. California women school superintendents: characteristics and trends, 1874-1974. Dissertation Abstracts International, 1977, 37, 6871 A.
- Harris, N. F. Recruiting and Selecting a Superintendent - As Viewed by a School Board President. ERS Monograph. Educational Research Service, Arlington, Va., 1977.
- Helwig, J. T. & Council, K. A. (Eds.). SAS Users Guide. 1979 Edition. Raleigh, N.C.: SAS Institute, Inc., 1979.
- Hennig, M. & Jardim, A. How women can make the team. Working Women, September, 1977.
- Horner, M. S. Toward an understanding of achievement-related conflicts in women. Journal of Social Issues. 1972, 28(2), 157-175.

- Jones, E. & Montenegro, X. Women and Minority Representation in School Administration. Arlington, Va.: American Association of School Administrators, March 1982.
- Kanter, R. M. & Wheatley, M. J. Career Development Women in Academic Administration: The Role of Training. Washington, D.C.: Project on the Status and Education of Women, September 1978.
- Kimmel, E., Harlow, D. & Topping, M. Special programs to promote women into educational administration. Phi Delta Kappan. April 1979.
- Krchniak, S. P. Variables associated with low incidence of women in school administration: towards empirical understanding. Paper presented at the annual meeting of AERA, Toronto, Canada, March 1978.
- Lester, P. & Chu, L. Women administrators: feminine, masculine, or androgynous? 1979. (ERIC Document Reproduction Service No. ED 181 107).
- Love, R. B. Women in School Administration: The Route to the Top. Keynote address at the National Council of Administrative Women in Education. San Diego, Calif., February 14, 1980.
- Lyman, K. D. & Speizer, J. J. Advancing in school administration: a pilot project for women. Harvard Educational Review. 1980, 50(1), 25-35.
- Market Data Retrieval, Westport, Connecticut: Summer, 1981.
- Mertz, S., Grossnickle, D.R. and Tutcher, C. Women in administration? You've got to be kidding (revisited). NASSP Bulletin, December 1980.
- Neidig, M. B. Women applicants for administrative positions: attitudes held by administrators and school boards. Dissertation Abstracts International, 1973, 34, 2982-2983 A.
- Poll, C. No room at the top: A study of the social processes that contribute to the underrepresentation of women on the administrative levels of the New York City School System. City University of New York, 1978. Dissertation Abstracts International, 1978, 39, 3165 A.
- Prentice, M. G. Mid-Career Women in Administration. U.S. Office of Education. Women's Educational Equity Act. Drake University, 1980.

- Schmuck, P. A. Sex differentiation in public school administration. Arlington, Va.: National Council of Administrative Women in Education, 1975 (ERIC Document Reproduction Service No. ED 128 966).
- Schuch, B. M. Characteristics of women superintendents. Dissertation Abstracts International, 1980, 40, 4389 A.
- Shakeshaft, C. S. Dissertation research on women in educational administration: A synthesis of findings and paradigm for future research. (Doctoral dissertation, Texas A and M University, 1979). Dissertation Abstracts International, 1980, 40, 6455-A.
- Silver, P. F. Women in Educational Leadership: A Trend Discussion. Tulsa, Oklahoma, 1977.
- Smith, L. G. "From Plato to Jung: centuries of educational inequities." Educational Horizons. 1981, 60, (3), 4-10.
- Stiegemeier, L. Confidence - a necessity for women administrators, NASSP Bulletin, December 1980.
- The National Council of Administrative Women in Education. The Time is Now. Las Vegas, Nevada: February 24-25, 1977.
- Truett, C. Women in educational administration: Is there a basic role conflict? Paper presented at a conference on women and work. Bloomington, Indiana, March 18-21, 1979. (ERIC Document Reproduction Service No. ED 172 440).
- Weber, M. B., Feldman, J. R. & Poling, E.C. Why women are underrepresented in educational administration. Educational Leadership. January 1981.
- Zellman, G. L. The role of structural factors in limiting women's institutional participation. Journal of Social Issues, 32, (3) 1976.